

REMARKS

Claims 1-3 are currently pending in connection with the present application. Claims 1 and 3 are independent claims. By this amendment, claim 1 has been amended. Claims 2 and 3 have been added. There is no new matter. Applicant respectfully traverses the rejection set forth in the Office Action dated September 13, 2005.

Priority Documents

Applicant acknowledges and thanks the Examiner for the acknowledgement of priority under 35 U.S.C. §119, and further thanks the Examiner for the acknowledgement of all of the necessary priority documents as shown in the Office Action dated September 13, 2005.

Information Disclosure Statement

Applicant acknowledges and thanks the Examiner for the careful consideration of all of the references listed in the Information Disclosure Statement filed September 9, 2004.

Description of an Example Embodiment

An example embodiment of the present invention is directed to a remotely controllable mobile machine for grinding floor surfaces.¹ The grinding machine includes a drive motor 1b for driving the planar disk 1d and the grinding disks 1c1, 1c2, 1c3 and 1c4.² The use of four (4) grinding disks, as opposed to three, enables the grinding head to be balanced by providing a pair wise counter-rotating grinding disk which reduces the need for the operator to compensate or restrain the machine from drifting sideways. The drive motors 4a and 5a are mechanically connected to wheels 4 and 5, respectively, and control unit 6. The control signals are transmitted

¹ See Fig. 1 and Fig. 2

² See Fig. 3.

from the remote control device 7 to the control unit 6 via radio communications and thereby allow operator 8 to control the movement of the mobile grinding machine.

PRIOR ART REJECTIONS

35 U.S.C. §103 Duncan/Godfrey Rejection

Claim 1 stands rejected under 35 U.S.C. §103 as being unpatentable over Duncan et al. (U.S. Patent No. 6,238,277 B1) in view of Godfrey et al. (U.S. Patent No. 4,513,469). Applicant respectfully traverses this rejection.

The Examiner acknowledges that Duncan is silent in regards to a “control unit being operatively connected via a radio communication unit to an offering device for a remote controlled machine” as recited in independent claim 1.³ The Examiner allegedly relies upon the teachings of Godfrey et al. to meet these limitations, **but provides only uncited motivation to combine Hoffman with Malloy** to obtain the features of amended, independent claim 1. Accordingly, Applicant respectfully traverses this rejection.

Even If Combinable, Reference Combination Still Fails to Meet the Claimed Features

Duncan et al. is directed to a grinding machine having three (3) grinding disks 78, 80 and 82 and which has no propulsion mechanism.⁴ The operator controls the grinding machine via handle 18.⁵

Godfrey et al. discloses a radio-controlled vacuum cleaner, supported by three (3) wheels 18, 20 and 98 and propelled by drive motor 48 via drive rollers 22 and 24.⁶

³ Page 2 of the Office Action dated September 13, 2005.

⁴ See Duncan et al., Fig. 1 and Fig. 4.

⁵ See Duncan et al., Col. 6, Ins. 22-25 and Col. 8, Ins. 21-25).

⁶ See Godfrey et al., Fig. 1, Fig 2, Col. 2, Ins. 17-22, Col. 4, ln. 2, and Col. 2, Ins. 39-44, 67.

With respect to claim 1, Applicant submits that Duncan fails to teach or suggest “at least four rotatably supported grinding disks, the grinding disks being distributed over a planar disk rotatably supported at the bottom of the housing”. Instead, Duncan et al. only teaches using three (3) grinding disks, whereas **the use of four (4) grinding disks enables the grinding head to be balanced** by providing pairwise counter-rotating grinding disks, thereby reducing the need for the operator to compensate or restrain the machine from drifting sideways. Given that Duncan only teaches three (3) grinding disks and does not disclose the benefit obtained by having pairwise counter-rotating grinding disks, Applicant submits that Duncan et al. (taken either singly or in combination with Godfrey et al., even assuming *arguendo* that they could be combined) fails to teach the feature of four (4) rotatably supported grinding disks, as taught in amended, independent claim 1.

Applicant further submits that the combination of Duncan et al. and Godfrey et al. does not teach, suggest, or render obvious the invention claimed in claim 1 because the propulsion mechanism disclosed in Godfrey cannot function properly in a grinding machine’s dust-laden environment. A dust-laden environment would render frictional engagement, in a manner shown in Godfrey, impossible because the drive rollers (22 and 24) would fail to operate properly due to the excessive amount of dust likely to collect on the exterior surface of each wheel. Thus, Applicant respectfully submits that Godfrey et al. would teach away from any alleged combination with Duncan et al. *In re Gorden*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

Furthermore, Godfrey discloses the use of only a single motor for propelling the vacuum device and therefore, a combination of Duncan et al. and Godfrey et al. would not teach, suggest,

or render obvious a device having “drive motors, one mechanically connected to each wheel” as recited in amended, independent claim 1.

Accordingly, neither Duncan et al. nor Godfrey, either alone or in combination, teach, suggest, nor render obvious all of the features of amended, independent claim 1.

Lack of Motivation to Combine References

The alleged motivation cited by the Examiner for combining Duncan et al. and Godfrey et al. to reject independent claim 1, is “to allow the operator to control the tool from a remote location”.

Applicant asserts that the Examiner’s alleged motivation is based upon Applicant’s own disclosure and is therefore an improper use of hindsight. The Examiner merely viewed the present application, and attempted to select prior art containing remote controlled appliances (and still deficient of several limitations as indicated above), without citing specific evidence of motivation to combine the references, other than providing conclusory statements regarding the motivation and obviousness. Accordingly, absent such motivation, a prima facie case of obviousness under 35 U.S.C. §103(a) has not been established and the rejection must be withdrawn.

Applicant directs the Examiner's attention to two recent cases decided by the Court of Appeals for the Federal Circuit (CAFC), *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed.Cir. 1999) and *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed.Cir. 2000). Both of these cases set forth very rigorous requirements for establishing a prima facie case of obviousness under 35 U.S.C. §103(a).

To establish obviousness based on a combination of elements disclosed in the prior art, there must be some motivation, suggestion, or teaching of the desirability of making the specific combination that was made by the Applicant. The motivation suggestion or teaching may come explicitly from one of the following:

- (a) the statements in the prior art (patents themselves)
- (b) the knowledge of one of ordinary skill art, or in some cases,
- (c) the nature of the problem to be solved.

See Dembiczak 50 USPQ at 1614 (Fed.Cir. 1999).

In order to establish a prima facie case of obviousness under 35 U.S.C. §103(a), the Examiner must provide particular findings as to why the two pieces of prior art are combinable. See Dembiczak 50 USPQ2d at 1617. Broad conclusory statements standing alone are not "evidence".

Neither Duncan et al. nor Godfrey et al. teach or suggest combining their features to arrive at independent claim 1; nor does the Examiner cite any particular passage to provide evidence that such a combination would be obvious to one of ordinary skill in the art. On the contrary, the disclosed references seek to overcome differing problems and therefore do not constitute an obvious combination. Further, their teachings actually "teach away" from any such combination.

Duncan et al. is directed to an operator-driven, industrial grade grinding machine that operates in an extremely dust-laden environment. Duncan et al. seeks to develop an easily-operated, hand-manipulated grinder, approximately the size of a lawn mower, to overcome the problem associated with hand-manipulated, electrically powered grinding machines under danger

associated with massive commercial-grade grinding machines that operate at high speeds and pose considerable safety hazards.⁷

In contrast, Godfrey et al. is directed to a remote control vacuum cleaner operated by a single motor.⁸ Godfrey is directed to overcoming the problems commonly associated with self-propelled, randomly moving vacuum cleaners, such as the resulting impact with balls and/or furniture.⁹ Godfrey is directed to using relatively cheaply available, state-of-the-art radio control equipment, such as those available for model airplanes, boats and automobiles, to provide a steering and directional control method to the vacuum cleaner.¹⁰

It is clear that Godfrey does not teach, suggest or even contemplate incorporating a propulsion mechanism into a heavy, commercial grade grinding machine, because Godfrey highlights that the conversion of the vacuum cleaner “does not require complicated conversions, or heavy and costly electrical batteries” and “utilizes state-of-the-art radio controlled equipment and server controls presently available on the market for radio-controlled model airplanes, boats and automobiles,” which are generally used to propel small vehicles.

Given the distinct and differing problems solved by the references, neither reference provides any evidence teaching or suggesting their combination. Thus, it would not have been obvious to one of ordinary skill in the art to combine the teachings of Duncan and Godfrey.

⁷ Col. 1, lns. 29-35 and 52-65.

⁸ Fig. 6 (motor 42 driven by control unit 38).

⁹ Godfrey et. al., Col. 1, lns 16-20.

¹⁰ Godfrey et al., Col. 1, lns. 37-43.

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Relying on common knowledge or common sense of a person of ordinary skill in the art without any specific hint or suggestion of this in a particular reference is not a proper standard for reaching the conclusion of obviousness. See *In re Sang Lee*, 61 USPQ 2d 1430 (Fed. Cir. 2002).

¹¹ Fig. 6 (motor 42 driven by control unit 38).

¹² Godfrey et. al., Col. 1, lns 16-20.

¹³ Godfrey et al., Col. 1, lns. 37-43.

Further, relying on obvious design choice as a reason for combining teachings of the various references is again not the proper standard for obviousness. If the Examiner is relying on personal knowledge to support a finding of what is known in the art, the Examiner must provide an Affidavit or Declaration setting forth specific factual statements and explanation to support the finding. See 37 CFR 1.104(d)(2) and MPEP 2144.03(c).

In view of the above arguments, Applicant asserts that the Examiner has not established the required motivation for combining the teachings of Duncan and Godfrey and therefore fails to establish a prima facie case of obviousness under 35 U.S.C. §103(a).

In light of the arguments set forth above, Applicant submits that claim 1 is patentable. For somewhat similar reasons, Applicant submits that claim 3 is also patentable (although claim 3 should be governed solely by the limitations present therein and should not be limited, in any way, by limitations present in claim 1 and not present in claim 3). Furthermore, Applicant submits that claim 2 is patentable because it depends on amended, independent claim 1.

Therefore, Applicant requests that the rejection be withdrawn.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of claims 1-3 in connection with the present application is earnestly solicited.

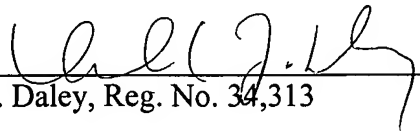
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By


Donald J. Daley, Reg. No. 34,313

P.O. Box 8910
Reston, Virginia 20195
(703) 668-8000

DJD/NMZ:lak